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EXTENSION TEACHING

ADVANCED COURSES IN DENTISTRY

ANNOUNCEMENT

1920-1921

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1. Annual Reports of the President and Treasurer to the Trustees.
2. The Catalogue of the University, price twenty-five cents, and the Announcements of the several Colleges and Schools, and of certain Divisions, issued in the Spring, and relating to the work of the next year. These are made as accurate as possible, but the right is reserved to make changes in detail as circumstances require. The current number of any of these Announcements will be sent without charge upon application to the Secretary of the University.

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Communications

All communications regarding the courses, as well as applications for admission and appointments for personal interviews, should be addressed to Albert P. Stevenson, Chairman, Administrative Staff, Advanced Courses in Dentistry, 437 West 59th Street, New York City (Telephone, Columbus 9516).

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E. H. RAYMOND, JR., D.D.S.	<i>Bacteriology and Root Therapy</i>
J. H. REED, JR., D.D.S.	<i>Anesthesia and Oral Surgery</i>
ALBERT H. STEVENSON, D.D.S.	<i>Oral Diagnosis</i>
ERVIN S. ULSAVER, D.D.S.	<i>Prosthodontia</i>
CLARENCE T. VAN WOERT, D.D.S.	<i>Radiology</i>
LEUMAN M. WAUGH, D.D.S.	<i>Patho-histology and Principles of Occlusion</i>
ARTHUR ZENTLER, D.D.S.	<i>Anesthesia and Oral Surgery</i>

Special Lecturers

THOMAS P. HINMAN, D.D.S.	<i>Operative Dentistry</i>
ROBERT H. IVY, D.D.S., M.D.	<i>Oral Surgery</i>
LEROY M. S. MINER, D.M.D.	<i>Oral Surgery</i>
CARL W. WALDRON, M.D., D.D.S.	<i>Oral Surgery</i>

SCHEDULE OF COURSES

These courses are conducted under the supervision of the Administrative Staff for progressive practitioners in dentistry. In its effort to present the highest type of post-graduate instruction, the Staff earnestly invites suggestions and criticisms from the dental profession. The entire program is repeated during the Spring Session. (See schedule on page 17.)

Winter Session, 1920-1921

FULL-TIME SERIES

Anesthesia.....	1 or 2 weeks
	Beginning September 7th
General course.....	6 weeks
	Beginning September 13th
Periodontia.....	1 week
	Beginning September 13th
Bacteriology and root therapy.....	1 or 2 weeks
	Beginning September 20th
Exodontia.....	1 or 2 weeks
	Beginning September 20th
Oral diagnosis.....	1 week
	Beginning September 27th
Radiology.....	2 weeks
	Beginning September 27th
Crown, inlay and bridgework.....	2 weeks
	Beginning October 4th
Plate prosthesis.....	1 or 2 weeks
	Beginning October 18th
Oral surgery.....	3 weeks
	Beginning October 4th-November 22d

PART-TIME SERIES

Anesthesia.....	2 weeks (mornings only)
	Beginning November 1st
Exodontia.....	2 weeks (afternoons only)
	Beginning November 1st
Plate prosthesis.....	8 Monday afternoons
	Beginning November 15th
Oral diagnosis.....	8 Tuesday afternoons
	Beginning November 16th
Radiology.....	8 Tuesday afternoons
	Beginning November 16th
Gold inlay.....	4 Wednesday afternoons
	Beginning November 17th
Bar and saddle prosthesis.....	6 Friday afternoons
	Beginning November 19th
Root canal and bacteriology.....	4 Tuesday afternoons
	Beginning December 14th
Ceramics.....	4 Wednesday afternoons
	Beginning December 15th
Oral surgery.....	6 wks 3 wks mornings
	Beginning January 3rd 3 wks afternoons

GENERAL STATEMENT

Much progress in the standardization of dental technic has been made during the past year, and, as a result, more direct and accurate methods have been evolved. In the light of searching criticism, all dental procedures must be based upon scientific truths, and many operations involve the fundamentals of medical science. Intelligent patients are now requiring not only relief from discomfort, but true restoration to function, and are sufficiently well informed to recognize the difference between the true and the false. They are also quickly aware of any reconstruction work that is not sanative in the mouth. Their medical advisers insist upon the elimination of all infection whether periapical or periodontal, and so the practice of dentistry has become more complex than ever before.

In the courses described, opportunity is given the progressive dentist to perfect himself in the various specialties. Theoretical and didactic instruction is supplemented by individual training as the students in small groups develop their operative skill.

As the limiting of all classes to small groups is believed to be essential to satisfactory instruction, the seminar plan will be continued. This is made possible by the completion of the new dental building designed and equipped for dental teaching. This building is located as a wing of the Vanderbilt Clinic and the College of Physicians and Surgeons at West Fifty-ninth Street and Tenth Avenue, in the heart of the medical center of Columbia University. An ample operating infirmary fully equipped with modern dental units and accessories occupies the upper floor, as well as a demonstrating room fitted with every convenience for post-graduate teaching. On the second floor are the executive offices and the lecture hall, the latter being equipped with apparatus for both still and motion reproduction on the screen. On the first floor a prosthetic laboratory is complete with individual units to meet all needs. The Department of Oral Surgery is located on the third floor of Vanderbilt Clinic and consists of a large operating room with adjoining rooms for radiographic examinations and the administration of various anesthetics.

Through the associated medical departments, interesting clinical material is always available for both the dental and oral surgery infirmaries. The demonstrating rooms are so arranged that large overhead mirrors reflect every movement of the operators, the observers being seated in comfort during the sessions.

The following pages will indicate that a revision of the courses has been effected. New subjects have been added and the teaching staff considerably augmented. Instruction in the various subjects is presented in Full-time and Part-time Series. Full-time courses are so arranged that practitioners distant from New York City may obtain continuous instruction. Part-time courses offer instruction covering a longer period with hours of attendance so arranged that the student can devote part of his time to his practice. All time will be used to advantage, and classes will start promptly as scheduled. It will be noted that the courses are planned so there is little interference with one another and are in a sequence that will appeal

to the applicant. Motion-picture films have proved their teaching value in dental technic, and operations enlarged upon the screen reveal clearly details otherwise impossible to show. Supplementing the clinical instruction, a number of these teaching films will be shown during the coming Sessions. Lectures, illustrated with slides, and new diagrammatic charts will supplement other instruction. In each of the courses, the student will be provided with:

- (a) An outline showing the steps of the technic.
- (b) A list of instruments and materials recommended by the instructor.
- (c) A certificate of attendance.

Admission and Registration

Admission to the various courses of instruction is limited to reputable dentists of either sex who present evidence of legal authority to practice dentistry.

Applicants for admission to any of the courses will be furnished with blanks on which they will give such information as to qualifications as may be required. This form, with the entire tuition fee or an advance payment of at least 25 per cent. for each course the applicant desires to enter, is to be forwarded to Dr. Albert H. Stevenson, Chairman, Administrative Staff, Advanced Courses in Dentistry, 437 West Fifty-ninth Street, New York City.

Owing to the nature of post-graduate instruction sections must contain but a limited number of students, and *no reservation will be made without the customary portion of fee.*

Checks should be made payable to Columbia University.

All applications for admission must receive the approval of the Administrative Staff. After such approval the applicant will be assigned to a place in the class or classes and notified; otherwise the tuition fee or advance payment will be returned.

Practitioners residing in New York City or vicinity will be required to appear in person to complete details of registration. Those residing at a distance may register upon their arrival, prior to the beginning of the course or courses. Membership in the various classes is limited, and assignment of places in any class or classes will be made in the order in which applications and tuition fees are received.

Arrangements have been made for the instructors to appear as scheduled. In case of unavoidable absence, their instruction will be presented by other members of the staff.

The schedule is subject to such changes as conditions may make necessary, to the advantage of the greatest number. The hours stated for attendance are minimum and will be increased if found necessary.

Accommodations

Non-resident students may arrange for accommodations in the University dormitories at 116th Street during their term of attendance. The rates are very reasonable. For particulars, apply to the Superintendent of Buildings and Grounds, Columbia University.

A booklet containing full information regarding the hotels and hotel rates in New York City will be mailed upon request.

Fees

All fees for tuition are payable in advance, and checks or money orders should be made payable to Columbia University.

The acceptance of a part or the entire tuition fee does not obligate the University to admit the applicant. Any such sums paid are returnable in the event the number of applications exceeds the capacity of any class, or if the applicant is rejected for other reasons. The University reserves also the right to return the *pro rata* part of the fee paid for tuition in any course to any student who may at any time be deemed not fitted to continue.

After admission to any course no return of fees, either in part or in full, will be made to persons who may decide for any reason to withdraw. Exception to this rule may be made in the case of those who, because of serious personal illness, certified to by a physician of reputable standing, are obliged to withdraw entirely from the course or courses. In considering such applications, the student will be regarded as having withdrawn upon the date on which the Registrar receives from him his written notice of a withdrawal, and any refund will be reckoned from that date.

Infirmaries

The location of the dental and oral surgery infirmary adjacent to the many medical departments of the Vanderbilt Clinic should provide ample material for the courses.

Practitioners in general are also urged to refer deserving cases, and those who take courses will be permitted to utilize their own patients whenever the cases presented meet with the approval of the instructors in the respective departments.

There will be no charge for services to patients treated in the infirmaries, except a nominal fee to cover the cost of materials, or when prosthetic restorations are to be made. Patients will be accepted from clinics, dispensaries, hospitals and charitable institutions.

Communications

All communications regarding the courses, as well as applications for admission and appointments for personal interviews, should be addressed to Dr. Albert H. Stevenson, Chairman, Administrative Staff, Advanced Courses in Dentistry, 437 West Fifty-ninth Street, New York City (Telephone, Columbus 9516).

FULL-TIME SERIES

In presenting the following arrangement of the Full-time Series of the Winter Session courses, opportunity is given the practitioner to increase his judgment and skill by attending the one or more courses that he feels he requires; but the General Course of six weeks' duration gives him the most pertinent subjects properly co-ordinated.

These full-time courses are planned primarily for practitioners located outside of New York City, and preference will be given their requests for reservations in

the sections. The Administrative Staff desires that visiting dentists have every courtesy and convenience during the period of instruction.

Each student will be mailed a list of instruments required for the course for which he enrolls, so that he may secure them before he leaves his office; also an outline of the instruction in convenient form for binding and future reference. A certificate of attendance will be issued by the Registrar of the University at the end of each series.

Course G—General post-graduate. Six weeks, beginning Monday, September 13.

Hours (minimum)—10 a. m. to 1 p. m.—2 to 5 p. m. daily. Fee \$420.

Instructors: DRs. ELMER S. BEST, HAROLD K. BOX, WILLIAM A. GIFFEN, HENRY W. GILLET, JOHN OPPIE MCCALL, FORREST H. ORTON, FREDERIC A. PEESO, PAUL R. STILLMAN, GEORGE A. THOMPSON, FRANK T. VAN WOERT, LEUMAN M. WAUGH, and assistants.

In arranging this course of instruction, due consideration has been given to the unorganized methods of dental procedure and efforts will be made to concentrate, as far as possible, upon standardized technic. The instructors named above will present their branches, co-ordinating their subjects with those that precede or follow them in the course.

The plan of instruction is an intensive one, as the following branches of dental science are included: Oral diagnosis, Dental radiology, Periodontia, Pulp conservation, Bacteriology and Root canal therapy, Dental ceramics, Cast gold inlay technic, Crown and bridgework and Plate prosthesis. These subjects will be covered as outlined in the topical descriptions which follow.

Operative as well as Prosthetic technic must be performed by each member of the section as assigned by the instructors. By close application, it is believed that the practitioner at the end of this course will have materially increased his judgment and skill in restoring the mouth to a state of health.

Course P—Periodontia. One week, beginning Monday, September 13.

Hours—10 a. m. to 12 m.—2 to 5 p. m. daily. Fee \$72.

Instructors: DRs. PAUL R. STILLMAN, JOHN OPPIE MCCALL, HAROLD K. BOX, and assistants.

The instructors in this course have prepared a consistent and rational outline of study that is invaluable to the practice of periodontia. The etiology of periodontoclasia will be presented concisely, and the classification of types by Drs. Stillman and McCall will be illustrated with cases in the infirmary. The histo-pathology of those infections that have their inception in the subgingival space will be illustrated and explained by Dr. Box who will present the results of his original research.

Instruction and practice in surgical instrumentation and mouth prophylaxis will be a part of the course, and each student will be expected to apply the technic as taught in the infirmary, under the supervision of the instructors.

The effect of traumatic occlusion will be indicated, and measures for relieving it shown. Considerable time will be devoted to the management of difficult cases and their proper treatment.

Course BRC—Bacteriology and root canal therapy. Two weeks, beginning Monday, September 20.

Hours—First week, 10 a. m. to 12 m.—1 to 5 p. m.; second week, 9 a. m. to 12 m. daily. Fee \$84.

Instructors: DRs. EDWIN J. NESTLER and E. H. RAYMOND.

Dr. Nestler will show by demonstration the means of gaining access to the various canals, cleansing, and methods of reaching apices of difficult canals with the incidental instruments employed; the removal of imperfect root canal fillings, ionization, and subsequent treatment. He

will present the indications for the employment of the Callhan method as well as the use of the sodium and potassium, and various methods of sterilization. The filling of canals and the technic employed in securing a homogeneous root filling will be clearly demonstrated. Under his direction members of the class will be expected to get like results during the second week.

Each step will be checked radiographically and bacteriologically, the cultures being grown and identified in the bacteriological laboratory under Dr. Raymond's direction. Students will be given laboratory instruction in the various culture media and methods of staining for differentiation of bacteria.

(For increasing judgment in determining which teeth can be conserved with safety, the course in Oral diagnosis should be taken in conjunction with this course.)

Course OD—Oral diagnosis. Two weeks, beginning Monday, September 27.

Hours—First week, 2 to 7 p. m. daily; second week, 5 to 7 p. m. daily. Fee \$84.

Instructors: DRs. ELMER S. BEST, FRANK T. VAN WOERT, and LEUMAN M. WAUGH.

The many diverse opinions regarding non-vital teeth have confused the dental mind and persuaded many practitioners to take radical measures. It is believed that by concentration upon this subject, each one taking the instruction will establish a basis for future diagnosis.

In this course, each student will be trained in a standardized examination of the mouth, and a diagnosis of conditions by: (a) complete radiographic examination; (b) vitality tests; (c) study casts; (d) clinical examination. This part of the instruction will be under Dr. Best's direction, and from cases presented it will be determined which teeth are to be conserved. The treatment of infected dentin in vital teeth and means of pulp conservation will receive consideration.

Instruction in exact radiographic technic will be given by Dr. Van Woert, as described below.

The making of study casts and the classifying of cases will be under the supervision of Dr. Waugh.

(While the course can be covered in one week, the practical work of the second week should be taken if possible.)

Course DR—Dental radiology. Two weeks, beginning Monday, September 27. Fee \$60.

Hours 5 to 7 p. m. daily.

Instructors: DRs. FRANK T. VAN WOERT and EDWIN J. NESTLER.

Empiricism has stamped most of our intra-oral work, but with the reliance now placed upon this important diagnostic aid no practitioner can afford uncertain methods in its application. As a mathematically and scientifically accurate method of controlling the central rays in intra-oral work has been evolved this course will contain detailed instruction in this technic, and each one in the section will be given opportunity to take radiographs and to accurately reproduce them under Dr. Van Woert's direction. Stereoscopic work will also receive attention, and a practical technic for developing, fixing and rapid mounting will be demonstrated and explained.

Course CIB—Crown and bridgework, including gold inlay and ceramics. Two weeks, beginning Monday, October 4.

Hours (minimum)—9 a. m. to 12 m.—1 to 4 p. m. daily. Fee \$120.

Instructors: DRs. FORREST H. ORTON, FREDERIC A. PEESO, GEORGE A. THOMPSON, and assistants.

In this course an effort will be made to present the fundamentals of standardized bridgework construction, and to demonstrate the application of the various types of restorations that meet the requirements of modern dental prosthesis, with special attention to occlusion, articulation and esthetics.

Dr. Thompson will show the preparation of teeth in the mouth for porcelain jacket crowns, and all steps to cementation, covering: stripping the enamel; cutting the shoulder; fitting the band; selection of shade and study of color; Impression; model construction; wrapping the matrix;

packing and blending of porcelain. He will demonstrate the technic of inlay-making, particularly those inlays to be used as abutments, showing impressions, anatomical carving and casting. His ingenious removable bridge pieces for difficult cases will be presented and described.

Dr. Orton will, in addition to other instruction, construct a three-quarter veneer crown and show its application, and the students will make at least one of these crowns for practice.

Dr. Peeso will demonstrate some of the attachments used in the Peeso system of removable bridgework that have many applications.

The hours indicated above are minimum and may be extended in order that students will have opportunity to prepare cases and make crowns or inlays under individual supervision.

Course PP—Plate prosthesis. One or two weeks, beginning Monday, October 18.

Hours—10 a. m. to 12 m.—2 to 5 p. m. daily. Fee, one week, \$60; two weeks, \$100.

Instructors: DR. WILLIAM A. GIFFEN, and assistants.

The first session of the course will be devoted to a diagnosis of cases in the infirmary by Dr. Giffen, and the taking of study impressions for determining, with exactness, any malformations presenting. This will be followed by demonstration of technic, by steps, on practical cases, including: the making of approximating models; impression trays and preliminary impression and their significance; the making of try-in plates and bite-rims; taking the bite, mounting on the articulator and selection of anatomical teeth; the arrangement of teeth to produce normal balance bite; flasking and vulcanizing; carving for esthetics, and the finishing and grinding-in of the dentures.

(While the course may be covered in one week by observation, those students remaining for two weeks will be assigned cases and will carry them through to completion.)

PART-TIME SERIES

It is believed that practitioners in New York City and vicinity are eager for post-graduate instruction if courses are planned for them in such a way as not materially to interfere with their practices. Accordingly, the following series is presented so that those who attend will have to absent themselves from the office but one afternoon each week for each subject, and, by the extension of the instruction over a number of weeks, obtain a thorough knowledge of the subject acquired through individual instruction and practice in the infirmary.

As in the Full-time courses, each student will be provided with:

- (a) An outline showing the steps of the technic.
- (b) A list of instruments and materials recommended by the instructor.
- (c) A certificate of attendance.

Course OD—Oral diagnosis. Eight Tuesday afternoons beginning November 16.

Hours—First four weeks, 2 to 7 p. m.; last four weeks, 5 to 7 p. m. Fee \$84.

Instructors: DRs. ALBERT H. STEVENSON, FRANK T. VAN WOERT, LEUMAN M. WAUGH, and assistants.

In this course instruction will be given in oral diagnosis, including Dr. Van Woert's technic for accurate radiographic reproduction. The systematic examination and charting of the mouth, as well as the use of agents and methods for the determination of the vitality of teeth will be demonstrated and applied as in the similar course described on page 10. Each student will make case examinations in the infirmary, and should acquire from the course a basis for future diagnosis.

Course DR—Dental radiology. Eight Tuesday afternoons beginning November 16.

Hours—5 to 7 p. m. Fee \$60.

Instructors: DRs. FRANK T. VAN WOERT and EDWIN J. NESTLER.

This instruction will constitute a course of training in accurate dental radiology by control of the central rays. Reproductions, posing, refinements of developing, fixing and rapid mounting will be demonstrated as part of the course.

Course BR—Bacteriology and root therapy. Four Tuesday afternoons beginning December 14.

Hours—2 to 5 p. m. Fee \$60.

Instructors: DRs. EDWIN J. NESTLER and E. H. RAYMOND.

A consistent root canal technic with each step checked radiographically and bacteriologically will be shown by Dr. Nestler on selected difficult cases from practice. The bacteriological work will be under the supervision of Dr. Raymond, and when the cultures are taken from the root canals they will be grown in appropriate media in the bacteriological laboratory. The recognition of the types of bacteria and the technic of their differentiation will be explained in detail. The aim will be to stimulate each student to the need for bacteriological tests in all root canal operations.

Course G1—Gold inlay technic. Four Wednesday afternoons beginning November 17.

Hours—2 to 5 p. m. Fee \$48.

Instructors: DR. HENRY W. GILLET and assistants.

This course includes clinical demonstration of the operative and prosthetic technic incidental to the insertion of properly carved gold inlays, restoring normal tooth-form and function. Dr. Gillett will give comprehensive instruction in cavity preparator; classification of cavities, and the technic of the indirect method of inlay-making. Each member of the class will be given opportunity to make one or more inlays according to the technic.

Course C—Ceramics. Four Wednesday afternoons beginning December 15.

Hours—2 to 5 p. m. Fee \$48.

Instructors: DR. WILLIAM D. TRACY and assistants.

The instruction will include operative and prosthetic technic for the construction of porcelain jacket crowns as esthetic and practical restorations of vital and non-vital teeth. The various steps shown will include: removing of enamel; cutting of shoulder; fitting the band; selection of shade; impression; model construction; making of matrix; testing; baking; cementation and finishing. Each student will be given opportunity to complete at least one case during the course.

Course BS—Bar and saddle prosthesis. Six Friday afternoons beginning November 19.

Hours—2 to 5 p. m. Fee \$72.

Instructors: DR. FORRY R. GETZ and assistants.

Instruction in this course has been added to meet the increased use of arch and lingual bar dentures, as well as other types of saddle restoration. Methods of overcoming the difficulties of securing accurate impressions of partial cases will be demonstrated upon practical cases in the operative demonstrating room. The making of study models, models of artificial stone, and the various types of attachments, including wrought clasps and cast clasps and saddles, will be shown.

Dr. Getz will present the operative and prosthetic technic incidental to the construction of a series of lugs and will demonstrate their use with either flat or half round rolled and drawn metal clasps.

Course PP—Plate prosthesis. Eight Monday afternoons beginning November 15.

Hours—2 to 5 p. m. Fee \$72.

Instructors: DR. JAMES P. RUYL and assistants.

Practitioners who take this course will construct a denture selected by the instructors and perform the entire work under their supervision. They may also be required to make dentures for other patients (either their own or from the infirmary) under the direction of the instructors, but performing part of the work outside of regular class hours.

Dr. Ruyl has developed a most satisfactory technic of denture construction and those students who apply can themselves attain a high degree of efficiency from this course.

ORAL SURGERY DEPARTMENT

Instruction in this department is conducted in the Oral Surgery Infirmary, located in the Vanderbilt Clinic, and courses in Conductive anesthesia, Nitrous oxid anesthesia, Exodontia and Oral surgery are presented at designated periods. While these are essentially clinical courses, lectures in Anatomy, Bacteriology and Oral pathology supplement the didactic instruction. The attending staff conducts the major part of the work, but prominent oral surgeons from other cities will give lectures and demonstrations during the year. From January 1 to May 1, the operations in this infirmary aggregated over 3,000 in number.

The Vanderbilt Clinic is one of the oldest established institutions in New York City, and the medical and surgical departments adjacent to the Oral Surgery Infirmary insure a constant supply of cases with interesting histories for diagnosis and treatment. The Oral Surgery Infirmary consists of a completely equipped operating room and adjoining rooms for anesthesia, X-ray examinations and developing, transillumination and case histories.

Externships are available for a limited number of ambitious practitioners who have taken at least one of the courses in this department.

As the infirmary is in operation continually, special students may be admitted for clinical instruction by arrangement through the executive office.

Supervisor of clinical instruction: DR. M. I. SCHAMBERG.

Instructors: DRS. HENRY S. DUNNING, BISSELL B. PALMER, JR., ARTHUR ZENTLER, DOUGLAS B. PARKER, and A. BERGER.

Special lecturers: DRS. ROBERT H. IVY, LEROY M. S. MINER, and CARL W. WALDRON.

Assistant Instructors: DRS. S. S. GROSS, J. H. REED, JR., and ARTHUR W. BARK.

Clinical assistants: DRS. J. A. McCAFFREY, J. LARSON, EDWARD A. HEINZER, JEROME M. SCHWEITZER, J. O'GORMAN LANE, SAMUEL HEMLEY, PHILIP GREENBERG, GORDON M. GANUN, and P. L. SCHWARTZ.

Oral Surgery

While the instruction in the courses in Oral surgery is mainly clinical, sufficient lectures will be held to give the practitioner a scientific and practical knowledge

of the many malformations, injuries, diseases and new growths of the mouth, jaws, and face, that come within the field of the oral surgeon, and instruction will be given in the advanced technic of their surgical removal, correction or treatment.

The clinical instruction will consist of a study of such operations as: Difficult extractions, excision of impacted and non-erupted teeth, root amputations, removal of dental cysts, reduction of fractured jaws, excision of epuli and other growths, and such other minor oral surgical conditions as present.

With a well-organized staff the courses will be presented as scheduled, and each student will receive supplementary training in anesthesia, as well as in the taking of intra- and extra-oral plates and films for purposes of diagnosis. Illustrated talks on anatomy, oral pathology, and oral diagnosis will be given during the period of instruction, with illustrated lectures of approved operations.

During the Winter Session the following courses are scheduled:

Course OS-1—Oral surgery. Three weeks, beginning Monday, October 4.
Hours—10 a. m. to 1 p. m.—2 to 4:30 p. m. daily.

Course OS-2—Oral surgery. Three weeks, beginning Monday, November 22.
Hours—10 a. m. to 1 p. m.—2 to 4:30 p. m. daily.

Course OS-3—Oral surgery. Six weeks, beginning Monday, January 3.
Three weeks' afternoon and three weeks' morning attendance. Fee (for any of the above) \$210.

Anesthesia

Courses in anesthesia will be given under the direction of the instructors in the Oral Surgery Department. Instruction will include the application of the various methods of producing local and nitrous oxid and oxygen anesthesia for dental and oral surgical purposes.

During the first week practical instruction will be given in the selection of syringes and needles, the making of solutions, infiltration versus conductive or nerve blocking, and their respective indications. Short lectures in anatomy will supplement the practical instruction, and wet anatomical specimens will be used to show technic. The general administration of nitrous oxid and oxygen as used in dentistry and oral surgery will be taught. The use of the various types of apparatus will be presented by Dr. Palmer during the second week. This instruction may be taken separately if desired. The precautions to be followed, untoward effects and means of handling same, and the treatment of post-operative pain and shock will be demonstrated to the members of the sections and be given careful consideration. Every practitioner who attends will be given opportunity to administer anesthetics at the discretion of the instructor in charge.

Course A-1—Anesthesia. One week, beginning Tuesday, September 7.
Hours—10 a. m. to 1 p. m.—2 to 4:30 p. m. daily. Fee \$60.

Course A-2—Anesthesia. Two weeks, beginning Tuesday, September 7.
Hours—10 a. m. to 1 p. m.—2 to 4:30 p. m. daily. Fee \$100.

*ADVANCED COURSES IN DENTISTRY* 15

Course A-3—Anesthesia. Two weeks, beginning Monday, November 1.

(Mornings only—general anesthesia not included.)

Hours—10 a. m. to 1 p. m. daily. Fee \$60.

Exodontia

This course will consist of clinical instruction in advanced methods in exodontia with its allied branches, such as the administration of anesthetics and roentgenology as pertains to the practice of exodontia, particularly difficult extractions and impactions. In addition to the various operations which will be performed under conductive and nitrous oxid and oxygen anesthesia, instruction will be given by demonstrations and lectures. Practitioners who attend the courses will receive full information as to the diagnosis and prognosis of the various cases that may be present in actual practice. Special reference will be made to the technic of curettement and other means of encouraging regeneration and reducing post-operative pain and discomfort. This course will be conducted in the Oral Surgery operating room with the available clinical material at hand.

During the second week, students may, at the discretion of the instructors, be given opportunity to participate in some of the work.

Course E-1—Exodontia. Oneweek, beginning Monday, September 20.

Hours—10 a. m. to 1 p. m.—2 to 4:30 p. m. daily. Fee \$60.

Course E-2—Oxodontia. Two weeks, beginning Monday, September 20.

Hours—10 a. m. to 1 p. m.—2 to 4:20 p. m. daily. Fee \$100.

Course E-3—Exodontia. Two weeks, beginning Monday, November 1.
(Afternoons only—clinical practice not included.)

Hours—2 to 4:30 p. m. daily. Fee \$60.

SCHEDULE OF COURSES

Spring Session 1921

FULL-TIME, SERIES

Anesthesia	Beginning January 31st	1 or 2 weeks
General course	Beginning February 7th	6 weeks
Periodontia	Beginning February 7th	1 week
Bacteriology and root therapy	Beginning February 14th	1 or 2 weeks
Exodontia	Beginning February 14th	1 or 2 weeks
Oral diagnosis	Beginning February 21st	1 week
Radiology	Beginning February 21st	2 weeks
Crown, inlay and bridgework	Beginning February 28th	2 weeks
Plate prosthesis	Beginning March 14th	1 or 2 weeks
Oral surgery	Beginning February 28th-April 18th	3 weeks

PART-TIME SERIES

Anesthesia	Beginning April 4th	2 weeks (mornings only)
Exodontia	Beginning April 4th	2 weeks (afternoons only)
Plate prosthesis	Beginning April 18th	8 Monday afternoons
Oral diagnosis	Beginning April 19th	8 Tuesday afternoons
Radiology	Beginning April 19th	8 Tuesday afternoons
Gold inlay	Beginning April 20th	4 Wednesday afternoons
Bar and saddle prosthesis	Beginning April 22d	6 Friday afternoons
Oral surgery	Beginning May 16th	6 wks $\left\{ \begin{array}{l} 3 \text{ wks mornings} \\ 3 \text{ wks afternoons} \end{array} \right.$
Root canal and bacteriology	Beginning May 17th	4 Tuesday afternoons
Ceramics	Beginning May 18th	4 Wednesday afternoons